IN THE CLAIMS

Please amend the claims as follows:

1-2. (Cancelled).

3. (Currently Amended) A method of noise filtering a signal, the method comprising the steps of:

estimating a type of noise in the signal; and

enabling one of at least two noise filtering operations, the enabled noise filtering operation being a most suitable noise filtering operation for the estimated type of noise,

wherein said enabling step comprises the sub-steps:

enabling a median filtering operation if the estimated type of noise is long-tailed noise; and

enabling a spatio-temporal rational filtering operation if the estimated type of noise is Gaussian noise or contaminated Gaussian noise,

wherein the sub-step of enabling a spatio-temporal rational filtering operation comprises the further sub-steps:

enabling a first spatio-temporal rational filtering operation if the estimated type of noise is Gaussian noise; and

enabling a second spatio-temporal rational filtering operation if the estimated type of noise is contaminated Gaussian noise,

and wherein the first spatio-temporal rational filtering operation takes into account at least one temporal direction, and the second spatio-temporal ~~rstional~~ rational filtering operation takes into account at least one combination of a temporal direction and a spatial direction.

4. (Cancelled).

5. (Previously Presented) A method of noise filtering a signal, the method comprising the steps of:

estimating a type of noise in the signal; and

enabling one of at least two noise filtering operations, the enabled noise filtering operation being a most suitable noise filtering operation for the estimated type of noise,

wherein said enabling step comprises the sub-steps:

enabling a median filtering operation if the estimated type of noise is long-tailed noise; and

enabling a spatio-temporal rational filtering operation if the estimated type of noise is Gaussian noise or contaminated Gaussian noise,

and wherein:

a kurtosis of the noise is used as a metric for estimating the type of noise;

the median filtering operation is enabled if the kurtosis is above a first threshold; and

the spatio-temporal rational filtering operation is enabled if the kurtosis is below said first threshold.

6. (Currently Amended) The method of noise filtering as claimed in claim 3, wherein:

a kurtosis of the noise is used as a metric for estimating the type of noise;

the median filtering operation is enabled if the kurtosis is above a first threshold;

the first spatio-temporal rational filtering operation is enabled if the kurtosis is below a second threshold, said second threshold being lower than said first threshold; and

the second spatio-temporal rational filtering operation is enabled if the kurtosis is above the second threshold and below the first threshold.

7. (Previously Presented) The method of noise filtering as claimed in claim 6, wherein the first threshold is about 15 and the second threshold is about 6.

8. (Previously Presented) The method of noise filtering as claimed in claim 3, wherein in said noise estimating step, the

noise in the signal is estimated by a difference between the signal and a noise-filtered version of the signal.

9. (Previously Presented) The method of noise filtering as claimed in claim 8, wherein the noise-filtered version of the signal is obtained by subjecting the signal to a median filtering operation.

10-11. (Cancelled).

12. (Previously Presented) The method of noise filtering as claimed in claim 5, wherein in said noise estimating step, the noise in the signal is estimated by a difference between the signal and a noise-filtered version of the signal.

13. (Previously Presented) The method of noise filtering as claimed in claim 12, wherein the noise-filtered version of the signal is obtained by subjecting the signal to a median filtering operation.

14. (Currently Amended) A device for noise filtering a signal, the device comprising:

means for estimating a type of noise in the signal;

a median filter for filtering said signal;

a first spatio-temporal rational filter and a second spatio-temporal rational filter for filtering said signal; and

means for enabling one of said median filter and said first and second spatio-temporal rational filters, the enabled filter being a most suitable filter for the estimated type of noise,

wherein said enabling means:

enables said median filter if the estimated type of noise is long-tailed noise;

enables said first spatio-temporal rational filter if the estimated type of noise is Gaussian noise; and

enables said second spatio-temporal rational filter if the ~~extimated~~ estimated type of noise is contaminated Gaussian noise,

and wherein the first spatio-temporal rational filter takes into account at least one temporal direction, and the second spatio-temporal rational filter takes into account at least one combination of a temporal direction and a spatial direction.

15. (Previously Presented) A video system comprising:

means for obtaining an image sequence; and

a device as claimed in claim 14 for noise filtering the image sequence.

16. (Previously Presented) A device for noise filtering a signal, the device comprising:

means for estimating a type of noise in the signal;

a median filter for filtering said signal;

a spatio-temporal rational filter; and

means for enabling one of said median filter and said spatio-temporal rational filter, the enabled filter being a most suitable filter for the estimated type of noise,

wherein said enabling means enables said median filter if the estimated type of noise is long-tailed noise, and enables said spatio-temporal rational filter if the estimated type of noise is Gaussian noise or contaminated Gaussian noise,

wherein said estimating means uses a kurtosis of the noise as a metric for estimating the type of noise,

and wherein said enabling means:

enables said median filter if the kurtosis is above a first threshold; and

enables said spatio-temporal rational filter if the kurtosis is below said first threshold.

17. (Previously Presented) A video system comprising:

means for obtaining an image sequence; and

a device as claimed in claim 16 for noise filtering the image sequence.